

1. (Currently Amended) A process for polishing wafers comprising:  
mixing a marker with a slurry to form a slurry mixture, wherein said marker has a phosphorescence upon illumination by a light source;  
performing chemical mechanical polishing on a wafer using said slurry mixture;  
rinsing said slurry mixture from said wafer; and  
checking said wafer for marker residue.
2. (Original) The process in claim 1, wherein said checking comprises illuminating said wafer with a light source and detecting a spectrum of light returned from said wafer.
3. (Original) The process in claim 2, wherein said checking illuminates light to, and detects light from, edges of said wafer.
4. (Original) The process in claim 2, wherein said light source comprises one of a light emitting diode and a laser.
5. (Canceled).
6. (Currently Amended) The process in claim 1, wherein said marker is mixed with said slurry in small enough quantities so ~~as to~~ as to not affect a polishing capability of said slurry.

7. (Currently Amended) ~~The process in claim 1,~~ A process for polishing wafers comprising:  
mixing a marker with a slurry to form a slurry mixture;  
performing chemical mechanical polishing on a wafer using said slurry mixture;  
rinsing said slurry mixture from said wafer; and  
checking said wafer for marker residue,

wherein said checking comprises residual gas analysis and said marker has a higher vapor pressure than said slurry.

8. (Currently Amended) A process for polishing and cleaning silicon wafers comprising:  
mixing a marker with a slurry to form a slurry mixture, wherein said marker has a higher vapor pressure than said slurry;  
performing chemical mechanical polishing on a silicon wafer using said slurry mixture;  
rinsing said slurry mixture from said silicon wafer; and  
checking said silicon wafer for marker residue; and  
~~repeating said rinsing process if said checking process detects said marker residue on said~~  
~~wafer.~~

9. (Original) The process in claim 8, wherein said checking comprises illuminating said silicon wafer with a light source and detecting a spectrum of light returned from said silicon wafer.

wherein said checking comprises reactive gas analysis and said marker has a higher vapor pressure than said slurry.

15-20. (Canceled).